| 1 | | - 6 | ^ : | im. | _ |
|----|--------------|-----|------------|--------|---|
| nn | \mathbf{o} | At. | ('10 | ım | c |
| | - | | V.10 | ,,,,,, | - |



Application/Control No.

10/518,300

ASHWORTH ET AL.

Examiner

Art Unit

Applicant(s)/Patent under Reexamination

EBENEZER SACKEY

1624

| | ~ | Rejected |
|---|----------|----------|
| l | ./ | Rejected |

- (Through numeral)
Cancelled

Restricted

N Non-Elected

Interference

A Appeal
O Objected

| 01- | · | Date | | | | | | | | | |
|----------|----------------------------------|--------------|----------|--------------|---------------|----------------|----------|--|--|--------------|---|
| Cla | | | | | | Jate | - | | | | |
| Final | Original | 10/1/07 | | | | | | | | | |
| | 1 | 25 | | | П | | | | | | |
| | 1 2 3 4 5 | П | | | | | | | | | |
| | 3 | | | \vdash | | _ | _ | | | | |
| | 4 | T | | | | | | | | | |
| | 5 | Т | | | | | | | | | |
| | 6 | Н | | | | | | | | | |
| | 7 | π | | | | | | | | | |
| | 8 | П | | | | | | | | | l |
| | 9 | Ţ | | | | | | | | | l |
| | 10 11 12 13 14 15 | ç | | Γ. | | | | | | | l |
| | 11 | | | | | | | | | | |
| | 12 | | | | | | | | | | |
| | 13 | | | | | | | | | | l |
| <u></u> | 14 | | | | | L | | | | | |
| | 15 | | | | | | | | | | |
| | 16 | 丄 | | _ | <u> </u> | | | | | | l |
| | 16 17 18 | <u> </u> | Ŀ | L | _ | | | L | | <u> </u> | l |
| <u></u> | 18 | <u> </u> | _ | Ŀ | _ | _ | | | | _ | l |
| | 19 20 | ╙ | _ | ┕ | _ | L | | | | _ | ļ |
| | 20 | L_ | _ | | _ | | <u> </u> | _ | _ | <u> </u> | l |
| | 21 | <u> </u> | _ | ╙ | <u> </u> | _ | ļ | <u> </u> | | | ļ |
| | 22 | ļ., | <u> </u> | <u> </u> | ļ | <u> </u> | ⊩ | <u> </u> | | | l |
| | 23 | \vdash | ├ | | | | - | | - | | |
| | 24 25 | ├— | ⊢ | - | ├— | ⊢ | ├ | ├ | | ├─ | l |
| | 26 | ╁ | ┝ | ├ | ┢ | - | ┢ | | | ├─ | l |
| | 27 | - | ┢ | - | | - | - | - | | - | l |
| | 27 28 29 | - | - | | - | | - | - | - | \vdash | l |
| | 29 | \vdash | - | - | - | - | _ | - | - | - | |
| | 30 | | | <u> </u> | H | - | - | - | \vdash | \vdash | ١ |
| | 31 | | _ | | \vdash | | | - | | | i |
| | 32 | | | | | | | | | | ١ |
| | 32 33 | | | | | | | | | | 1 |
| | 34 | | | | | | | | | | |
| | 35 | | | | | | | | | |] |
| | 36 | | L. | _ | | | | <u> </u> | L | <u> </u> | ļ |
| | 37 | _ | | L | | | | | | | l |
| | 38 | _ | _ | | _ | _ | _ | _ | _ | <u> </u> | l |
| - | 39 | _ | <u> </u> | _ | _ | | _ | _ | _ | <u> </u> | ļ |
| <u> </u> | 40 | ⊢ | | | <u> </u> | _ | _ | _ | <u> </u> | _ | ł |
| | 41 | ├- | ├ | ├ | | ├— | <u> </u> | | | <u> </u> | ł |
| | 42 | \vdash | \vdash | \vdash | ⊢ | \vdash | ├- | | \vdash | ⊢ | ł |
| | 43 44 | - | - | - | - | \vdash | \vdash | \vdash | - | \vdash | l |
| - | 45 | - | - | - | - | _ | - | - | - | _ | ŀ |
| - | 46 | - | - | - | - | | \vdash | | \vdash | - | 1 |
| - | 47 | \vdash | \vdash | | \vdash | 1 | \vdash | \vdash | | | ١ |
| - | 48 | | 1 | T | | t | | | T | | ١ |
| | 49 | | | Τ | · | | | | | T | 1 |
| | 50 | 1 | 1 | | $\overline{}$ | 1 | 1 | | † | _ | 1 |

| E E | Clai | im | | | _ | ַ | Date | 3 | | | | | Cla | aim | | | |
|---|-------|----------|-----------------|--------------|---------|---|--------------|--------------|--------------|--------------|--|---|-------|----------|--|----------|---|
| 52 102 53 103 54 105 55 106 57 107 58 108 59 109 60 110 61 111 62 112 63 113 64 114 65 116 67 117 68 118 69 119 70 120 71 121 72 122 73 123 74 124 75 125 76 126 77 127 78 128 79 129 80 130 81 131 82 132 83 133 84 134 85 136 86 136 87 137 88 138 89 139 <td< td=""><td>Final</td><td>Original</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>Final</td><td>Original</td><td></td><td></td><td></td></td<> | Final | Original | | | | | | | | | | | Final | Original | | | |
| 53 103 54 104 55 105 56 106 57 107 58 108 59 109 60 110 61 111 62 112 63 113 64 114 65 115 66 116 67 117 68 118 69 119 70 120 71 121 72 122 73 123 74 124 75 126 76 127 78 128 79 129 80 130 81 131 82 132 83 133 84 134 85 136 88 133 88 133 88 133 89 139 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>Γ</td></td<> | | | | | | | | | | | | | | | | | Γ |
| 54 104 55 105 56 106 57 107 58 109 60 110 61 111 62 112 63 114 65 115 66 116 67 117 68 118 69 119 70 120 71 121 72 122 73 124 75 125 76 126 77 127 78 128 79 129 80 130 81 131 82 132 83 133 84 134 85 136 86 136 87 137 88 135 86 136 87 137 88 138 99 140 <td< td=""><td></td><td>52</td><td></td><td></td><td>Т</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>102</td><td></td><td></td><td></td></td<> | | 52 | | | Т | | | | | | | | | 102 | | | |
| 55 105 56 106 57 107 58 109 60 110 61 111 62 112 63 113 64 114 65 116 67 117 68 119 70 120 71 121 72 122 73 123 74 124 75 125 76 127 78 128 79 129 80 130 81 131 82 132 83 133 84 134 85 135 86 136 87 137 88 139 90 140 91 141 92 142 93 140 | | | | | | | | | | | | | | | | | |
| 56 106 57 107 58 109 60 110 61 111 62 112 63 113 64 114 65 115 66 115 67 117 68 118 69 119 70 120 71 121 72 122 73 123 74 124 75 125 76 126 77 127 78 128 79 129 80 130 81 131 82 132 83 133 84 134 134 134 135 136 87 137 88 138 139 139 90 140 | | | | | | | | | | | | | | | | | L |
| 57 107 58 108 59 109 60 110 61 111 62 112 63 113 64 114 65 115 66 117 68 118 69 119 70 120 71 121 72 122 73 124 75 125 76 126 77 127 78 128 79 129 80 130 81 131 82 132 79 129 80 130 81 131 82 133 83 133 84 134 136 137 88 138 90 140 91 141 | | | | | L | | | L | <u> </u> | _ | | | | 105 | | | L |
| 58 108 59 109 60 110 61 111 62 112 63 113 64 114 65 115 66 116 67 117 68 119 70 120 71 121 72 122 73 123 74 124 75 125 76 126 77 127 78 128 79 129 80 130 81 131 82 132 83 133 84 134 85 135 86 136 87 137 88 138 89 139 90 140 91 141 92 142 93 1440 94 145 <t< td=""><td></td><td></td><td>4</td><td></td><td>┸</td><td></td><td></td><td>ļ</td><td><u>_</u></td><td>匚</td><td></td><td></td><td></td><td></td><td></td><td></td><td>L</td></t<> | | | 4 | | ┸ | | | ļ | <u>_</u> | 匚 | | | | | | | L |
| 109 | | | \Box | | 1 | | | <u> </u> | | | _ | | | | | _ | L |
| 60 110 61 111 62 112 63 113 64 114 65 115 66 116 67 117 68 118 69 119 70 120 71 121 72 122 73 123 74 124 75 125 76 126 77 127 78 128 79 129 80 130 81 131 82 132 83 133 84 134 85 135 86 136 87 137 88 138 89 139 90 140 91 141 92 142 93 143 94 144 95 146 <td< td=""><td></td><td></td><td></td><td>_</td><td>┸</td><td></td><td></td><td></td><td>ļ</td><td></td><td></td><td></td><td></td><td>108</td><td></td><td></td><td>L</td></td<> | | | | _ | ┸ | | | | ļ | | | | | 108 | | | L |
| 61 111 62 112 63 113 64 114 65 115 66 115 67 117 68 118 69 119 70 120 71 121 72 122 73 123 74 124 75 125 76 126 77 127 78 128 79 129 80 130 81 131 82 132 83 133 84 134 85 135 86 136 87 137 88 138 89 139 90 140 91 141 92 142 93 143 94 144 95 146 97 147 <td< td=""><td></td><td></td><td>\Box</td><td></td><td>丄</td><td></td><td></td><td><u> </u></td><td></td><td><u> </u></td><td>_</td><td></td><td></td><td></td><td></td><td></td><td>L</td></td<> | | | \Box | | 丄 | | | <u> </u> | | <u> </u> | _ | | | | | | L |
| 62 112 63 113 64 114 65 115 66 117 68 119 69 119 70 120 71 121 72 122 73 123 74 124 75 125 76 126 77 127 78 128 79 129 80 130 81 131 82 132 83 133 84 134 85 135 86 136 87 137 88 139 90 140 91 141 92 142 93 140 94 144 95 146 97 147 98 148 | | | _ | | 4 | _ | _ | _ | _ | | _ | | | | _ | | L |
| 63 113 64 114 65 115 66 117 68 118 69 119 70 120 71 121 72 122 73 123 74 124 75 125 76 126 77 127 78 128 79 129 80 130 81 131 82 132 83 133 84 134 85 135 86 136 87 137 88 139 90 140 91 141 92 142 93 144 95 145 96 146 97 147 98 148 | | 61 | _ | | 4 | | <u> </u> | <u> </u> | _ | _ | _ | | | 111 | | | L |
| 64 114 65 115 66 116 67 117 68 118 69 119 70 120 71 121 72 122 73 123 74 124 75 125 76 126 77 127 78 128 79 129 80 130 81 131 82 132 83 133 84 134 85 135 86 136 87 137 88 139 90 140 91 141 92 142 93 144 94 144 95 146 97 147 98 148 | | 62 | - | | 4 | _ | _ | <u> </u> | <u> </u> | _ | L | | | | | _ | L |
| 65 115 66 116 67 117 68 118 69 119 70 120 71 121 72 122 73 123 74 124 75 125 76 126 77 127 78 128 79 129 80 130 81 131 82 132 83 133 84 134 85 135 86 136 87 137 88 139 90 140 91 141 92 142 93 144 94 144 95 146 97 147 98 148 | | | \dashv | \dashv | + | _ | _ | - | - | _ | <u>. </u> | | | | | | ╀ |
| 66 116 67 117 68 118 69 119 70 120 71 121 72 122 73 123 74 124 75 126 77 127 78 128 79 129 80 130 81 131 82 132 83 133 84 134 85 135 86 136 87 137 88 138 89 139 90 140 91 141 92 142 93 143 94 144 95 146 97 147 98 148 | | | \dashv | | - | | | | ├ ─ | | - | | | | - | | H |
| 67 117 68 118 69 119 70 120 71 121 72 123 74 124 75 125 76 126 77 127 78 128 79 129 80 130 81 131 82 132 83 133 84 134 85 135 86 136 87 137 88 139 90 140 91 141 92 142 93 144 95 146 97 146 97 147 98 148 | | | \vdash | | | _ | - | - | - | - | - | | | | | | ┞ |
| 68 118 69 119 70 120 71 121 72 122 73 123 74 124 75 126 77 127 78 128 79 128 80 130 81 131 82 132 83 133 84 134 85 135 86 136 87 137 88 139 90 140 91 141 92 142 93 144 95 146 97 146 97 147 98 148 | | | - | | + | _ | | ⊢ | ⊢ | ⊢ | ⊨ | | | | \vdash | ⊢ | ╀ |
| 69 119 70 120 71 121 72 122 73 123 74 124 75 125 76 126 77 127 78 128 79 129 80 130 81 131 82 132 83 133 84 134 85 135 86 136 87 138 139 140 91 141 92 142 93 144 95 144 96 146 97 147 98 148 | | | \vdash | \dashv | + | _ | | ⊢ | ├- | - | - | | | 117 | | ┝ | ╁ |
| 70 120 71 121 72 122 73 123 74 124 75 125 76 126 77 127 78 128 79 129 80 130 81 131 82 132 83 133 84 134 85 135 86 136 87 137 88 139 90 140 91 141 92 142 93 144 95 145 96 146 97 147 98 148 | | | - | | | | - | ├ | - | <u> </u> | - | | | | - | - | ┝ |
| 71 121 72 122 73 123 74 124 75 125 76 126 77 127 78 128 79 129 80 130 81 131 82 132 83 133 84 134 85 135 86 136 87 137 88 139 90 140 91 141 92 143 93 144 95 145 96 146 97 147 98 148 | | | \dashv | \dashv | + | _ | | ┢ | | ├— | - | | | 120 | | \vdash | ╀ |
| 72 122 73 123 74 124 75 125 76 126 77 127 78 128 79 129 80 130 81 131 82 132 83 133 84 134 85 135 86 137 88 139 90 140 91 141 92 142 93 144 95 145 96 146 97 147 98 148 | | | \vdash | \dashv | + | - | | \vdash | - | ├ | ├ | | | 121 | | ├ | ╁ |
| 74 124 75 125 76 126 77 127 78 128 79 129 80 130 81 131 82 132 83 133 84 134 85 135 86 136 87 137 88 139 90 140 91 141 92 142 93 144 95 145 96 146 97 147 98 148 | | | Н | \dashv | + | | \vdash | \vdash | \vdash | \vdash | \vdash | | | 122 | | \vdash | H |
| 74 124 75 125 76 126 77 127 78 128 79 129 80 130 81 131 82 132 83 133 84 134 85 135 86 136 87 137 88 139 90 140 91 141 92 142 93 144 95 145 96 146 97 147 98 148 | | 73 | H | + | - | | \vdash | t | ╁ | \vdash | \vdash | | | 123 | \vdash | | ╁ |
| 75 125 76 126 77 127 78 128 79 129 80 130 81 131 82 132 83 134 85 135 86 137 88 139 90 140 91 141 92 142 93 144 95 144 96 146 97 147 98 148 | - | | \vdash | + | + | _ | \vdash | ╁ | ╁ | ╁ | ╁ | | | 124 | - | ╌ | t |
| 76 126 77 128 79 129 80 130 81 131 82 132 83 133 84 134 85 135 86 136 87 138 89 139 90 140 91 141 92 143 93 144 95 144 96 146 97 148 | | | H | \top | + | _ | | t | | | T | | | | \vdash | | t |
| 77 127 78 128 79 129 80 130 81 131 82 132 83 133 84 134 85 135 86 136 87 138 89 139 90 140 91 141 92 142 93 144 95 144 96 146 97 148 | | | | \top | t | | | 1 | 1 | | t | | | 126 | | | t |
| 78 128 79 129 80 130 81 131 82 132 83 133 84 134 85 135 86 136 87 138 89 139 90 140 91 141 92 142 93 144 95 144 96 146 97 147 98 148 | | | П | \dashv | \top | | | T | | T | \vdash | | | | Т | _ | t |
| 79 129 80 130 81 131 82 132 83 133 84 134 85 135 86 136 87 137 88 139 90 140 91 141 92 142 93 144 95 144 96 146 97 148 | i | | Ħ | \top | 1 | | | T | † | | | | | | | _ | t |
| 80 130 81 131 82 132 83 133 84 134 85 135 86 136 87 137 88 139 90 140 91 141 92 140 93 144 93 144 95 146 97 147 98 148 | | 79 | | | + | | | | ĺ | | 1 | | | 129 | Г | | T |
| 81 131 82 132 83 133 84 134 85 135 86 136 87 137 88 139 90 140 91 141 92 142 93 144 95 144 96 145 98 147 148 | | | | | | | | | | | | | | 130 | | | T |
| 82 132 83 133 84 135 85 135 86 136 87 137 88 137 88 139 90 140 91 141 92 142 93 144 94 143 94 144 95 146 97 147 98 148 | | | П | \neg | | | | | | | | | | 131 | | | T |
| 84 134 85 135 86 136 87 137 88 137 89 138 90 140 91 141 92 142 93 143 94 143 95 146 97 147 98 148 | | 82 | | | | | | | | | 1 | | | 132 | | | Γ |
| 85 135 86 136 87 137 88 139 90 140 91 141 92 142 93 143 94 144 95 146 97 147 98 148 | | 83 | | | | | | | | | | | | 133 | | | T |
| 86 136 87 137 88 138 89 139 90 140 91 141 92 142 93 143 94 144 95 145 96 146 97 147 98 148 | | 84 | | | | | | | | | | | | 134 | | | |
| 87 137 88 138 89 139 90 140 91 141 92 142 93 143 94 144 95 145 96 146 97 147 98 148 | | | | | | | | | | | | | | | | | L |
| 88 138 89 139 90 140 91 141 92 142 93 143 94 144 95 145 96 146 97 147 98 148 | | | | | | _ | | | | | | | · | 136 | | | L |
| 89 139 90 140 91 141 92 142 93 143 94 144 95 145 96 146 97 147 98 148 | | | | | | | | | | | | • | | | | | L |
| 90 140 141 92 93 142 93 94 144 95 145 96 97 147 98 148 | | | Ш | | _ | | <u> </u> | <u> </u> | <u> </u> | _ | <u> </u> | | | | _ | L | L |
| 91 141 142 143 143 144 155 166 166 166 166 166 166 166 166 166 | | 89 | Ш | | \perp | | _ | $oxed{oxed}$ | | \vdash | _ | | | 139 | | Ľ | L |
| 92 142 143 144 144 95 145 96 146 97 147 148 | | 90 | | _ _ | \perp | | <u> </u> | | | | <u> </u> | <u> </u> | L |
| 93 143 144 144 95 145 96 146 97 147 98 148 | | | \sqcup | | 4 | _ | | <u> </u> | | <u> </u> | <u> </u> | | | | | <u> </u> | 1 |
| 94 144 145 145 146 147 148 148 1 | | | \sqcup | \perp | \bot | | _ | | \vdash | | _ | | | | _ | \vdash | ╀ |
| 95 145 146 97 147 98 148 | | | $\vdash \vdash$ | _ - | + | _ | — | \vdash | ₩ | — | - | | | | _ | - | ╀ |
| 96 146 147 148 148 | | | \vdash | - | + | | _ | - | - | - | _ | | - | | _ | _ | + |
| 97 147 148 148 1 | | | \vdash | - | + | | | - | - | | - | | | 145 | | | ╀ |
| 98 148 | | | \dashv | + | + | | \vdash | \vdash | | \vdash | _ | | | | | ⊢ | ╀ |
| | | | - | $-\!\!\!\!+$ | + | _ | | ├ | ₩ | \vdash | ₩ | | | | \vdash | - | ╀ |
| , | | | \vdash | + | + | | \vdash | ⊢ | \vdash | \vdash | \vdash | ł | | | \vdash | \vdash | ╁ |
| 100 150 | | | \vdash | + | + | _ | \vdash | \vdash | \vdash | \vdash | + | 1 | _ | | \vdash | \vdash | ╀ |

| Cli | aim | Date | | | | | | | | |
|-------------|---------------------------------|--------------|----------|----------|--------------|----------|--|----------|--|-----------|
| | | | | | | | | | | \neg |
| Final | Original | | | | | | | | | |
| | 101 | \vdash | | | | | | | \exists | \dashv |
| | 102 | П | | | | | | | | \neg |
| | 101 102 103 | | | | | | | | | \neg |
| | 104 | | | | | | | | | П |
| | 104 105 | | | | | | | | | |
| | 106 | | | | | | | | | |
| | 107 | | | | | | | | | |
| | 107 108 109 | | | | | | | | | Ш |
| | 109 | Ш | | | | | | | | Ш |
| | 110 111 | | | | _ | | | | L | |
| <u> </u> | 111 | Щ | • | | | Щ | | | | |
| | 112 113 | Щ | _ | Щ | \vdash | Щ | _ | | <u> </u> | |
| | 113 | Ш | | | | | | | | _ |
| | 114 | - | | | | | | | - | Н |
| | 115 116 | \vdash | | \vdash | <u> </u> | \vdash | | | <u> </u> | \vdash |
| <u> </u> | 117 | \vdash | | _ | \vdash | | - | - | - | Н |
| - | 118 | - | - | - | \vdash | \vdash | | \vdash | - | - |
| | 118 119 | | | H | - | | | _ | ├ | Н |
| | 120 | | | ┝ | | - | | H | ┢ | H |
| | 121 | - | | ┢ | - | \vdash | | H | \vdash | Н |
| | 122 | | | \vdash | | \vdash | _ | ┢ | | Н |
| | 121 122 123 | \vdash | | \vdash | \vdash | _ | | _ | _ | Н |
| | 124 125 | \vdash | | \vdash | \vdash | | | | | П |
| | 125 | | | Г | П | | | | | |
| | 126 | | | | | | | | | |
| | 127 | | | | | | | | | |
| | 128 | | | | | | | | _ | Щ |
| | 126 127 128 129 130 | | | | | <u> </u> | | <u> </u> | <u> </u> | |
| | 130 | _ | | _ | _ | <u> </u> | | | <u> </u> | Щ |
| | 131 | <u> </u> | | | <u> </u> | _ | _ | - | <u> </u> | Ш |
| <u> </u> | 132 133 | | | ⊢ | | <u> </u> | - | | <u> </u> | Н |
| <u> </u> | 134 | | | \vdash | | ⊢ | | _ | - | Н |
| | 135 | | | - | \vdash | ┢ | | - | | Н |
| | 135 136 137 | - | ÷ | ├─ | ├─ | - | - | ⊢ | - | Н |
| ┝ | 137 | \vdash | _ | ┢ | H | | | \vdash | \vdash | Н |
| | 138 | | | \vdash | | | | \vdash | | Н |
| | 138 139 | | • | \vdash | | | | | | |
| | 140 | | | | | | | | Г | |
| | 141 | | | | | | | | | 1 |
| | 142 | | | | | | | | | |
| | 143 | | | | | | | | | |
| | 144 | | | | | | | | | |
| | 145 | | | | | | | | | |
| | 146 | | _ | <u> </u> | <u> </u> | <u> </u> | | \vdash | <u> </u> | \square |
| | 147 | <u> </u> | <u> </u> | <u> </u> | <u> </u> | <u> </u> | ļ | ļ | | Н |
| <u> </u> | 148 | \vdash | ⊢ | <u> </u> | \vdash | ⊢ | \vdash | \vdash | ⊢ | Н |
| — | 150 | \vdash | \vdash | \vdash | \vdash | ⊢ | \vdash | \vdash | \vdash | Н |
| | LIDU | I | L | L | L | L | L | | L | 1 |